

**Vienna Instruments**  
**Solo Download Instruments**  
**Cymbals**  
**Standard/Full Library**

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## Introduction

Welcome to the Vienna Symphonic Library, and thank you for purchasing one of our Solo Download Instruments! This document contains the mapping information for the Standard and Full versions of the Vienna Instruments Cymbals. You will find in it a comprehensive survey of the articulations/Patches content, a listing of abbreviations, and the mapping list proper which gives details for every Patch, Matrix, and Preset.

The cymbals in this Download Library are complemented by the triangles which are also part of the Vienna Symphonic Library's Percussion Collection.

## Standard/Full Library

As opposed to the "Standard" versions of our Solo Download Instruments, the "Full" versions are identical with the corresponding instruments of a DVD Collection, i.e., they contain exactly the same samples, Patches, Matrices and Presets as the latter without any restrictions.

Installing a Download Instrument's Full version copies that instrument's sample content to a separate folder on your hard disk, so that it is not necessary to keep its Standard version installed – you may either delete it from your hard disk or at least remove it from the Directory Manager's list of activated instruments. In the Vienna Instruments Browser, the path of the Full version will be the same as that of the corresponding DVD Instrument, so that you can still see both versions as separate entries if you keep the Standard version installed.

## Data paths and Patch name conventions

Since the Full versions of Download Instruments conform to the corresponding DVD Instruments, the data paths in your Vienna Instruments browser will differ from those of Standard Download or Special Edition Instruments. For instance, the path of the Standard Download Library of Flute 1 is "02D Flute-1", and all Patches can be found in this folder regardless of the articulation group they belong to. The Patch number is also marked with a "D" so that you immediately know it is a Download Instrument. In the Vienna Special Edition, Flute 1 is located in the folder "11 Flutes" together with the other flutes. Here, the Patch number is marked with an "S". The Full Download of Flute 1 is located in the subfolder "32 Flute" of the section "Woodwind Patches", which again contains subfolders grouping the Patches according to type, e.g., "01 SHORT + LONG NOTES", "02 DYNAMICS", etc. Patch names of the Full Download Library may differ from the corresponding ones of the Standard Download Library.

While Full Download Instruments contain all articulations of the corresponding DVD Instruments, their Patches are not divided into Standard and Extended content.

## Patch information

The Patch information includes articulation type, playing range, number of samples used, RAM requirements, the number of velocity layers and alternations, AB switching possibilities, etc., as well as Patch specific information if necessary.

Where the type of articulation requires a special mapping (e.g., natural harmonics patches), the mapping layout will be shown in a detailed graphic.

**Major and minor runs** are always mapped to the keys of their scale, as are **arpeggios** to the keys of the broken chord played. **Grace notes** and **mordents** are mapped to their target note, i.e., the note the articulation ends with. Due to their nature, all **upward and downward articulations** (e.g., fixed glissandos and octave runs) have different mapping ranges – the upward movements ending the involved interval below the Patch's upper mapping range, while downward movements end the interval above its lower mapping range. (Please note that not all of the articulations mentioned above may be contained in your Collection.)

The Patch information also lists a Patch's velocity layers in detail. Velocity layer switches generally are the same for patches with the same number of layers but may occasionally be adapted to the instrument's requirements:

Layers	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6
2	1–88	89–127				
3	1–55	56–88	89–127			
4	1–55	56–88	89–108	109–127		
5	1–24	25–55	56–88	89–108	109–127	
6	1–24	25–55	56–88	89–108	109–118	119–127

## Matrix information

Each Matrix listing contains information regarding the Patches used for the Matrix, the number of horizontal and vertical dimensions, and switching properties. A mapping table shows the Cell positions for each of the Matrix' Patches.

**A/B switching** normally is set to A0 for upward/crescendo, and B0 for downward/diminuendo. However, some bass instruments go below that range so that the A/B keys have to be adapted accordingly. For example, the A/B switches for double bass are A0 and A#0 because the instrument's lower range extends to B0.

In order to facilitate working with **MIDI controller switches** like the Modulation wheel, the switching positions are not distributed equally across the controller range if they control more than two Matrix rows or columns; generally, the switching range will be narrower at the extreme positions because they are easy to set, and wider in the middle where it is harder to find the desired setting.

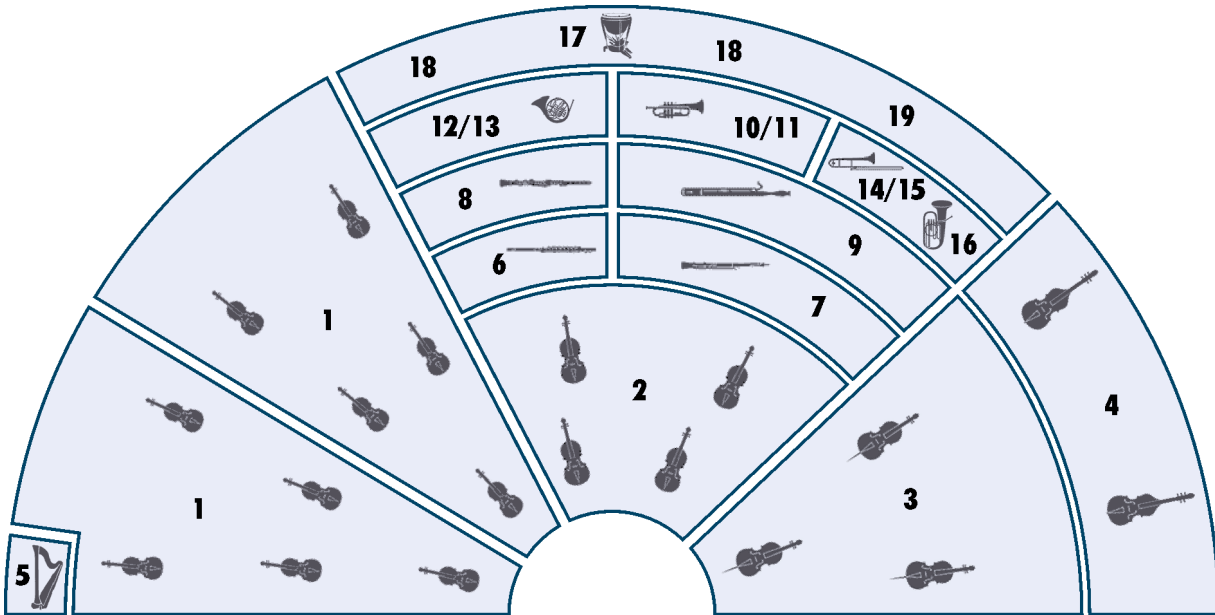
**Speed controller switches** naturally are adjusted to the Patches involved, and have been tested carefully as to their playability. However, if you find that they do not fit your playing, or want to try out other settings, you can change this as well as any other controller's settings at the **Control edit** page, and save the result in your Custom Matrix folder.

## Preset information

The Preset information lists the Matrices used in the Preset as well as its keyswitches. All other information can be gathered from the Matrix and Patch listings, so there's not really much to say here. Please note that the Matrices of a Preset can also be switched with MIDI Program Changes (VI: 101–112; VI PRO: 1–127) instead of keyboard notes, and if you like to keep your keyboard free for playing instead of switching, you can disable Preset keyswitching and only use MIDI Program Changes. Vienna Instruments PRO also allows you to define a MIDI Control for Preset keyswitching.

## The orchestra

There are several ways of setting up an orchestra, depending on the era of the piece played, the type of the piece and the instruments it requires, and even on the preference of the conductor. The figure below shows one of the more common setups, which can be taken as a guideline for mixing a composition, properly positioning the instruments in the stereo field and adding reverb according to the size of the concert hall you want your piece to be played in.



- |                           |                                 |
|---------------------------|---------------------------------|
| 1 1st and 2nd violin      | 9 Bassoon, contrabassoon        |
| 2 Viola                   | 10/11 Trumpet                   |
| 3 Cello                   | 12/13 Horn                      |
| 4 Double bass             | 14/15 Trombone                  |
| 5 Harp                    | 16 Tuba                         |
| 6 Concert flute, piccolo  | 17 Timpani                      |
| 7 Oboe, English horn      | 18 Drums, cymbals               |
| 8 Clarinet, bass clarinet | 19 other percussion instruments |

## Pitch

For designating pitch, the Vienna Symphonic Library uses International Pitch Notation (IPN), which was agreed upon internationally under the auspices of the Acoustical Society of America. In this system the international standard of A=440 Hz is called A4 and middle C is C4. All pitches are written as capital letters, their respective octave being indicated by a number next to it. The lowest C on the piano is C1 (the A below that is A0), etc.

You can tune your Vienna Instruments to other players, or adjust it to tunings of earlier musical periods by setting the Perform page's Master Tune option within a range of 420 to 460 Hz.

# Cymbals Standard Library

Vienna Instruments folder path: D – Percussion Patches / 83 Cymbals - Gongs

## Patches

### 01D Piatti-A

Range: C3–C5

Samples: 80

RAM: 5 MB

Single hits, damped fast and slow

Normal and slow hits

Performance repetitions

8 velocity layers

#### Mapping:

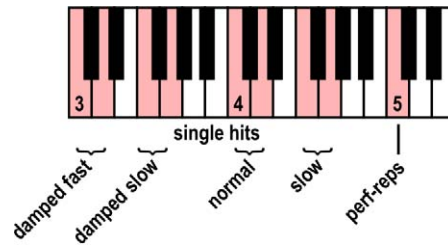
C3–D3: single hits, damped fast

F3–G3: single hits, damped slow

C4–D4: single hits, normal

F4–G4: single hits, slow

C5: performance repetitions (3 reps.)



### 02D Piatti-B\_13Z-Za

Range: C3–C4

Samples: 15

RAM: 1 MB

Zildjian Avedis, 13"

Muted and open hits

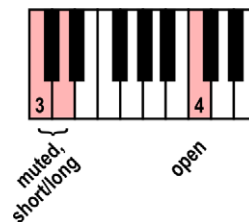
5 velocity layers

#### Mapping:

C3: muted, var. 1 (shorter)

D3: muted, var. 2 (longer)

C4: open



**03D Piatti-B\_18Z-Is / 04D Piatti-B\_20Z-Is / 05D Piatti-B\_22Z-Za****Range: C3–F4****Samples: 24****RAM: 1 MB**

Istanbul Janissary, 18" / Istanbul Symphonic, 20" / Zildijan Avedis, 22"

Muted and open hits, scrapes

6 velocity layers

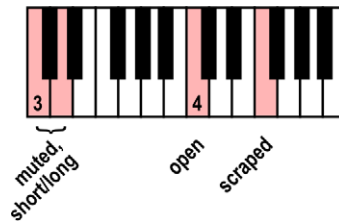
**Mapping:**

C3: muted, var. 1 (shorter)

D3: muted, var. 2 (longer)

C4: open

F4: scraped

**06D Cymbal\_Stick****Range: C4–A#6****Samples: 103****RAM: 6 MB**

Single hits, normal and damped

Performance repetitions

Tremolo normal (AB switch: long and short release) and dynamics

8 velocity layers

Release samples

AB switch: crescendo/diminuendo

**Mapping:**

C4–D4: single hits, normal

F4–G4: single hits, damped (shorter)

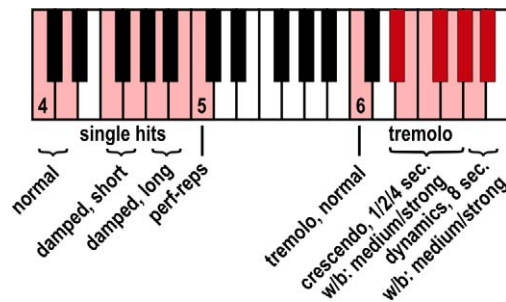
A4–B4: single hits, damped (longer)

C5: performance repetitions (3 reps.)

C6: tremolo, normal

D#6–A#6: medium and strong crescendo, 1, 2, and 4 sec. (strong crescendo on black keys)

A6–A#6: medium and strong dynamics, 8 sec. (AB switch, strong dynamics on black key)



**07D Cymbal\_Mallet****Range: C4–A#6****Samples: 119****RAM: 7 MB**

Single hits, soft and hard mallets

Damped

Performance repetitions

Tremolo normal (AB switch: long and short release) and dynamics

8 velocity layers

Release samples

AB switch: crescendo/diminuendo

**Mapping:**

C4–D4: single hits, soft mallets

C#4–D#4: single hits, hard mallets

F4–G4: single hits, damped (shorter)

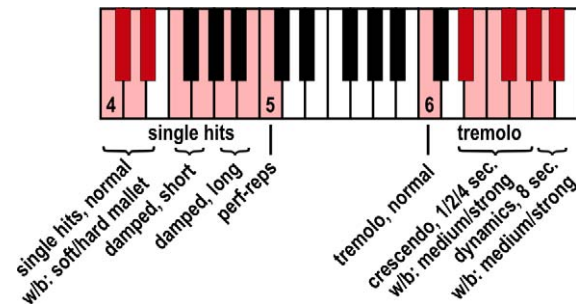
A4–B4: single hits, damped (longer)

C5: performance repetitions (3 reps.)

C6: tremolo, normal

D#6–A#6: medium and strong crescendo, 1, 2, and 4 sec. (strong crescendo on black keys)

A6–A#6: medium and strong dynamics, 8 sec. (AB switch, strong dynamics on black key)

**11D Triangle****Range: C4–A7****Samples: 128****RAM: 8 MB**

Single notes, open and damped (4 alternations)

Performance repetitions

1–3 upbeats

Tremolo normal (with release samples) and dynamics

8 velocity layers

Release samples

AB switch: crescendo/diminuendo

**Mapping:**

C4–D#4: hit from the side, open/damped (damped on black keys)

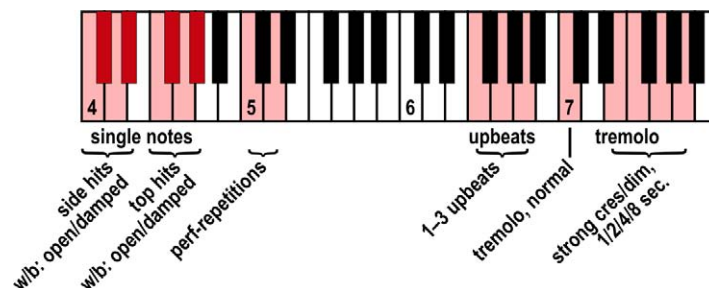
F4–G#4: hit from above, open/damped

C5, D5: performance repetitions (strokes alternating on lower and higher key)

F6–A6: 1–3 upbeats

C7: tremolo, normal

E7–A7: tremolo, strong crescendo and diminuendo (AB switch)





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**21D Waterphone\_basic****Range: C3–G5****Samples: 11****RAM: 1 MB**

Single notes: bowed, straight  
1 velocity layer

---

**22D Waterphone\_modulation****Range: C3–E7****Samples: 20****RAM: 1 MB**

Single notes: bowed, modulated. The modulation of the tone is effected by tipping the instrument or moving it in circles.  
1 velocity layer

## Matrices

### DL-Matrix Cymbal

Samples: 222

RAM: 13 MB

Patches:

06D Cymbal\_Stick

07D Cymbal\_Mallet

**Matrix switches:** Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	06D Cymbal_Stick	07D Cymbal_Mallet

### DL-Matrix Piatti

Samples: 167

RAM: 10 MB

Patches:

01D Piatti-A

Piatti-B\_13/18/20/22"

**Matrix switches:** Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	01D Piatti-A	02D Piatti-B_13Z-Za	03D Piatti-B_18Z-Is	04D Piatti-B_20Z-Is	05D Piatti-B_22Z-Za

### DL-Matrix Triangle

Samples: 128

RAM: 8 MB

Patch:

11D Triangle

### DL-Matrix Waterphone

Samples: 31

RAM: 1 MB

Patches:

21D Waterphone\_basic

22D Waterphone\_modulation

**Matrix switches:** Vertical: Modwheel, 2 zones

	H1
V1	21D Waterphone_basic
V2	22D Waterphone_modulation

# Cymbals Full Library

## 83 Cymbals - Gongs

### Cymbals

Nowadays the orchestral cymbal family consists of the pair (piatti), the suspended cymbal and the small antique cymbals.

The **pair of cymbals** is used especially to accentuate musical climaxes and from the Romantic period it has played an important role in the orchestra. Its powerful sound can rise above the entire orchestra. It is sounded by striking one plate against the other.

**Suspended cymbals** are struck with a stick or mallet. In the orchestra the standard instrument is the **Turkish cymbal**, which is used especially to create tension. The Chinese cymbal was introduced to the orchestra in the 20th century because of its exotic sound.

## Patches

### 01 PIATTI - A

#### 01 Piatti-A\_Single-Hits

Range: C3–C5

Samples: 80

RAM: 5 MB

Single hits, damped fast and slow

Normal and slow hits

Performance repetitions

8 velocity layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff

Release samples

#### Mapping:

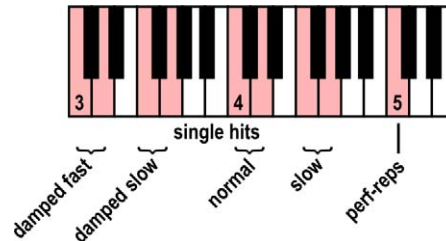
C3–D3: Single hits, damped fast

F3–G3: Single hits, damped slow

C4–D4: Single hits, normal

F4–G4: Single hits, slow

C5: performance repetitions (3 reps.)



### 02 PIATTI - series B

11", 13", 15", 16", 18", 20" and 22" cymbals

Muted and open hits, scrapes

#### 01 Piatti-B\_11Z-Chi (13Z-Za/15Z-Za/16Z-K)

Range: C3–C4

Samples: 15

RAM: 1 MB

Cymbals: Chinese, 11"; Zildjian Avedis, 13" and 15"; Avedis K1, 16"

Muted and open hits

5 velocity layers

#### Mapping:

C3: muted, var. 1 (shorter)

D3: muted, var. 2 (longer)

C4: open



**05 Piatti-B\_16Z-K2 (18Z-Is/20Z-Is/20Z-Za/22Z-Za)****Range: C3–F4****Samples: 20****RAM: 1 MB**

Cymbals: Avedis K2, 16"; Istanbul Janissary, 18"; Istanbul Symphonic, 20"; Zildjian Avedis, 20" and 22"  
 Muted and open hits,  
 scrapes  
 5 velocity layers

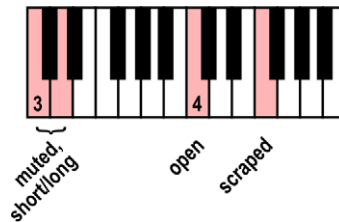
**Mapping:**

C3: muted, var. 1 (shorter)

D3: muted, var. 2 (longer)

C4: open

F4: Scraped

**03 CYMBAL standard - A**

Drumsticks and mallets  
 Single hits normal and damped  
 Performance repetitions,  
 Tremolo normal and dynamics

**01 Cym-A\_Stick****Range: C4–A#6****Samples: 103****RAM: 6 MB**

Single hits, normal and damped  
 Performance repetitions  
 Tremolo normal (AB switch: long and short release) and dynamics  
 8 velocity layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff  
 Release samples  
 AB switch: crescendo/diminuendo

**Mapping:**

C4–D4: Single hits, normal

F4–G4: Single hits, damped (shorter)

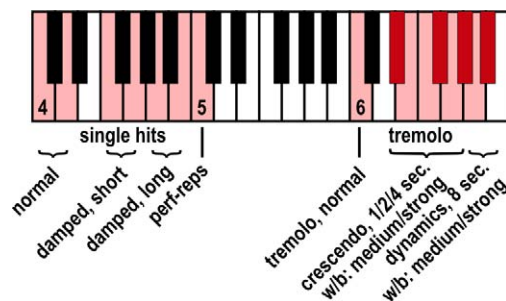
A4–B4: Single hits, damped (longer)

C5: performance repetitions (3 reps.)

C6: tremolo, normal

D#6–A#6: medium and strong crescendo, 1, 2, and 4 sec. (strong crescendo on black keys)

A6–A#6: medium and strong dynamics, 8 sec. (AB switch, strong dynamics on black key)



**02 Cym-A\_Mallet****Range: C4–A#6****Samples: 119****RAM: 7 MB**

Single hits, soft and hard mallets

Damped

Performance repetitions

Tremolo normal (AB switch: long and short release) and dynamics

8 velocity layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff

Release samples

AB switch: crescendo/diminuendo

**Mapping:**

C4–D4: Single hits, soft mallets

C#4–D#4: Single hits, hard mallets

F4–G4: Single hits, damped (shorter)

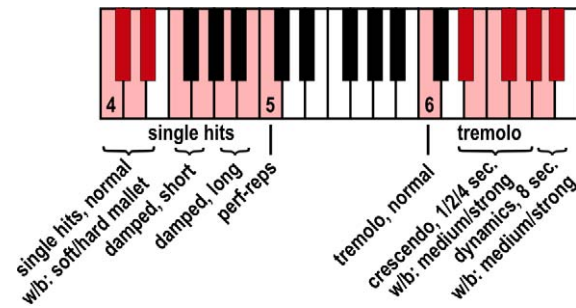
A4–B4: Single hits, damped (longer)

C5: performance repetitions (3 reps.)

C6: tremolo, normal

D#6–A#6: medium and strong crescendo, 1, 2, and 4 sec. (strong crescendo on black keys)

A6–A#6: medium and strong dynamics, 8 sec. (AB switch, strong dynamics on black key)



**04 CYMBAL standard - B**

Drumsticks, wool mallets, metal rod, brushes  
 Single hits normal and damped  
 Tremolo normal and dynamics

**01 Cym-B\_Stick (Mallet)****Range: C4–A#6****Samples: 33****RAM: 2 MB**

01 Wood sticks/02 Wool mallets  
 Single hits, normal and damped  
 Tremolo normal (AB switch: long and short release) and dynamics  
 3 velocity layers  
 Release samples  
 AB switch: crescendo/diminuendo

**Mapping:**

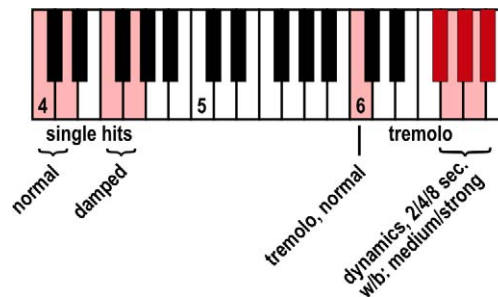
C4–D4: Single hits, normal

F4–G4: Single hits, damped

C6: tremolo, normal

F#6: Strong dynamics, 2 sec.

G6–A#6: medium and strong dynamics, 4 and 8 sec. (AB switch, strong dynamics on black keys)

**03 Cym-B\_Metal****Range: C4–A#6****Samples: 36****RAM: 2 MB**

Metal rod  
 Single hits, normal and damped  
 Tremolo normal (AB switch: long and short release) and dynamics  
 3 velocity layers  
 Release samples  
 AB switch: crescendo/diminuendo

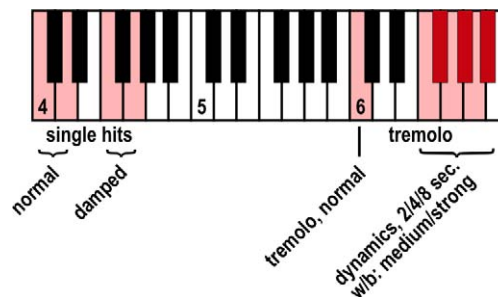
**Mapping:**

C4–D4: Single hits, normal

F4–G4: Single hits, damped

C6: tremolo, normal

F6–A#6: medium and strong dynamics, 2, 4, and 8 sec. (AB switch, strong dynamics on black keys; dim only 2 and 8 sec.)



**04 Cym-B\_Brush****Range: C4–A6****Samples: 18****RAM: 1 MB**

Brushes

Single hits, normal and damped

Tremolo normal (AB switch: long and short release) and dynamics

2 velocity layers

Release samples

AB switch: crescendo/diminuendo

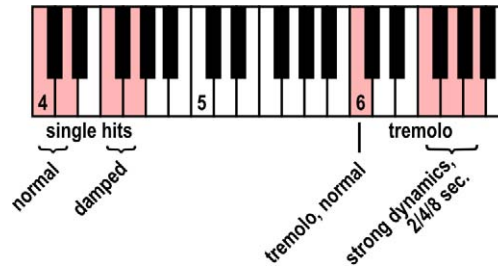
**Mapping:**

C4–D4: Single hits, normal

F4–G4: Single hits, damped

C6: tremolo, normal

F6–A6: Strong dynamics, 2, 4, and 8 sec. (AB switch; dim only 2 and 8 sec.)

**05 CYMBAL standard - C**

Drumsticks, wool mallets, metal rod

Single hits normal and damped

Tremolo normal and dynamics

**01 Cym-C\_Stick (Mallet/Metal)****Range: C4–A#6****Samples: 36****RAM: 2 MB**

01 Wood sticks/02 Wool mallets/03 Metal mallets

Single hits, normal and damped

Tremolo normal (AB switch: long and short release) and dynamics

3 velocity layers

Release samples

AB switch: crescendo/diminuendo

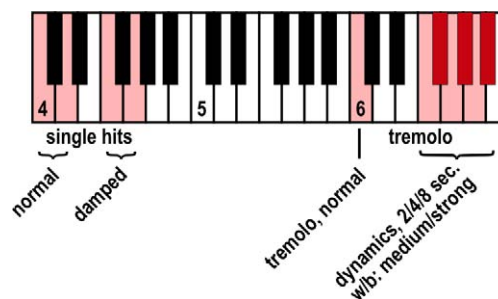
**Mapping:**

C4–D4: Single hits, normal

F4–G4: Single hits, damped

C6: tremolo, normal

F6–A#6: medium and strong dynamics, 2, 4, and 8 sec. (AB switch, strong dynamics on black keys; dim only 2 and 8 sec.)





**06 CYMBAL standard - D****Range: C4–A#6**

Drumsticks, wolle mallets, metal rod, brushes  
 Single hits normal and damped  
 Tremolo normal and dynamics

**01 Cym-D\_Stick (Mallet/Metal)****Samples: 36****RAM: 2 MB**

01 Wood sticks/02 Wool mallets/03 Metal mallets  
 Single hits, normal and damped  
 Tremolo normal (AB switch: long and short release) and dynamics  
 3 velocity layers  
 Release samples  
 AB switch: crescendo/diminuendo

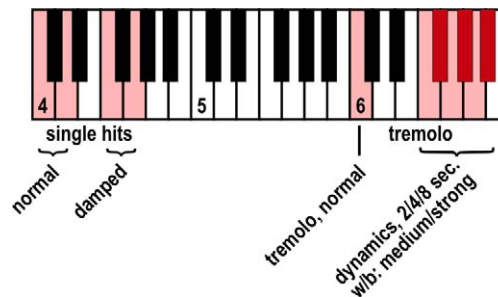
**Mapping:**

C4–D4: Single hits, normal

F4–G4: Single hits, damped

C6: tremolo, normal

F6–A#6: medium and strong dynamics, 2, 4, and 8 sec. (AB switch, strong dynamics on black keys; dim only 2 and 8 sec.)

**04 Cym-D\_Brush****Range: C4–A6****Samples: 19****RAM: 1 MB**

Brushes  
 Single hits, normal and damped  
 Tremolo normal (AB switch: long and short release) and dynamics  
 2 velocity layers  
 Release samples  
 AB switch: crescendo/diminuendo

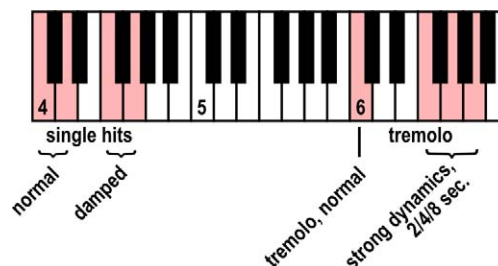
**Mapping:**

C4–D4: Single hits, normal

F4–G4: Single hits, damped

C6: tremolo, normal

F6–A6: Strong dynamics, 2, 4, and 8 sec. (AB switch; dim only 2 and 8 sec.)



## 07 CYMBAL Crash

15" and 16" crash cymbals

Drumsticks, mallets, timpani mallets, brushes, metal rod, and bowed

Rim, middle and dome hits, normal and damped

### 01 Cym-Crash\_15Z\_Stick (Mallet/Tmp)

Range: C3–B5

Samples: 105

RAM: 6 MB

01 Wood sticks/02 Mallet/03 Timpani mallet

Rim, middle, and dome hits

Normal and damped

5 velocity layers

#### Mapping:

C3–B3 – rim hits

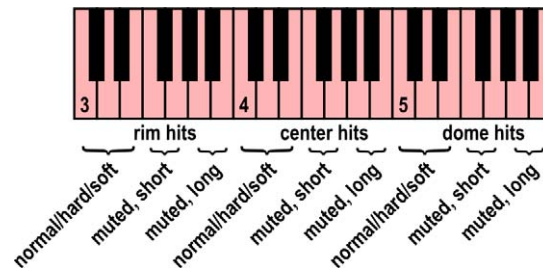
C4–B4 – body hits

C5–B5 – dome hits

C–E: Normal/hard/soft attack

F–G: muted, short

A–B: muted, long



### 04 Cym-Crash\_15Z\_Brush

Range: C4–B4

Samples: 7

RAM: 1 MB

Brushes: Normal hit, rubs, and muted hits

1 velocity layer

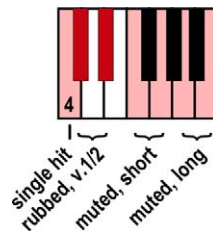
#### Mapping:

C4: Single hit, normal

C#4–D#4: Rubs, var. 1/2

F4–G4: muted, short

A4–B4: muted, long



**05 Cym-Crash\_15Z\_Rod****Range: C4–B4****Samples: 6****RAM: 1 MB**

Metal rod: Normal hit, rub, and muted hits  
1 velocity layer

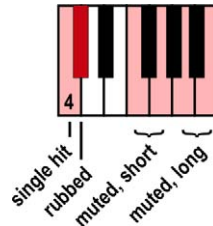
**Mapping:**

C4: Single hit, normal

C#4: Rub

F4–G4: muted, short

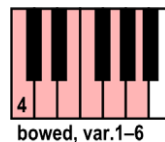
A4–B4: muted, long

**06 Cym-Crash\_15Z\_Bow****Range: C4–A4****Samples: 6****RAM: 1 MB**

Bowed, variations 1–6  
1 velocity layer

**Mapping:**

C4–A4: bowed, var. 1–6

**11 Cym-Crash\_16Z\_Stick (Mallet/Tmp)****Range: C3–B5****Samples: 105****RAM: 6 MB**

11 Wood sticks/12 Mallet/13 Timpani mallet  
Rim, middle, and dome hits  
Normal and damped  
5 velocity layers

**Mapping:**

C3–B3 – rim hits

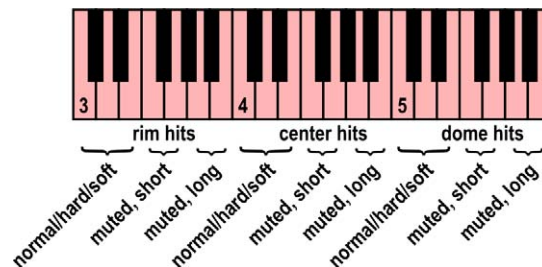
C4–B4 – body hits

C5–B5 – dome hits

C–E: Normal/hard/soft attack

F–G: muted, short

A–B: muted, long



**14 Cym-Crash\_16Z\_Brush****Range: C3–C5****Samples: 9****RAM: 1 MB**

Brushes: Rim, middle, and dome hits

Middle rubs

1 velocity layer

**Mapping:**

Rim:

C3: Single hit, normal

D3–E3: muted, short/long

Body:

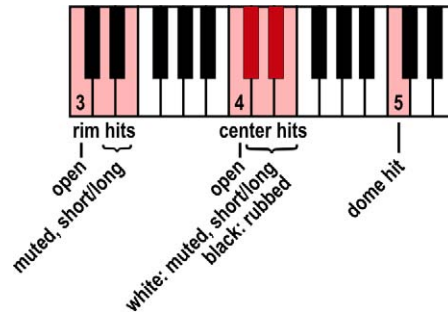
C4: Single hit, normal

C#4–D#4: Rubs

D4–E4: muted, short/long

Dome:

C5: Single hit, normal

**15 Cym-Crash\_16Z\_Rod****Range: C3–C5****Samples: 8****RAM: 1 MB**

Metal rod: Rim, middle, and dome hits

Middle rub

1 velocity layer

**Mapping:**

Rim:

C3: Single hit, normal

D3–E3: muted, short/long

Body:

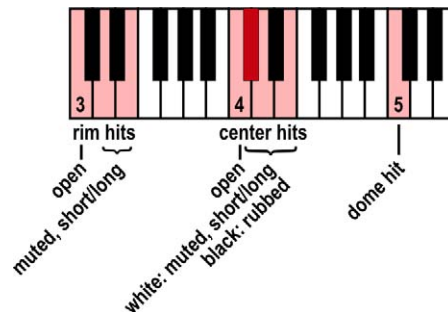
C4: Single hit, normal

C#4: Rub

D4–E4: muted, short/long

Dome:

C5: Single hit, normal

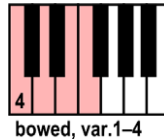
**16 Cym-Crash\_16Z\_Bow****Range: C4–F4****Samples: 4****RAM: 1 MB**

Bowed, variations 1–4

1 velocity layer

**Mapping:**

C4–F4: bowed, var. 1–4

**08 CYMBAL China**

18" and 22" Chinese cymbals

Drumsticks, mallets, timpani mallets, brushes, metal rod, and bowed

Rim and middle hits, normal and damped

**01 Cym-China\_18Z\_Stick (Mallet/Tmp)****Range: C3–B4****Samples: 70****RAM: 4 MB**

01 Wood sticks/02 Mallet/03 Timpani mallet

Rim and middle hits

Normal and damped

5 velocity layers

**Mapping:**

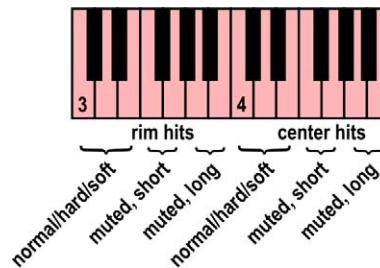
C3–B3 – rim hits

C4–B4 – body hits

C–E: Normal/hard/soft attack

F–G: muted, short

A–B: muted, long

**04 Cym-China\_18Z\_Brush****Range: C4–G4****Samples: 6****RAM: 1 MB**

Brushes: Normal hits, rubs, and muted hits

1 velocity layer

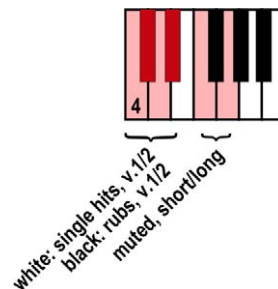
**Mapping:**

C4–D4: Single hits, normal

C#4–D#4: Rubs, var. 1/2

F4: muted, short

G4: muted, long



**05 Cym-China\_18Z\_Rod****Range: C4–G4****Samples: 4****RAM: 1 MB**

Metal rod: Normal hit, rub, and muted hits  
1 velocity layer

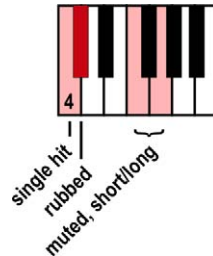
**Mapping:**

C4: Single hit, normal

C#4: Rub

F4: muted, short

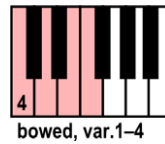
G4: muted, long

**06 Cym-China\_18Z\_Bow****Range: C4–F4****Samples: 4****RAM: 1 MB**

Bowed, variations 1–4  
1 velocity layer

**Mapping:**

C4–F4: bowed, var. 1–4

**11 Cym-China\_22Z\_Stick (Mallet/Tmp)****Range: C3–B4****Samples: 69****RAM: 4 MB**

11 Wood sticks/12 Mallet/13 Timpani mallet  
Rim and middle hits  
Normal and damped  
5 velocity layers

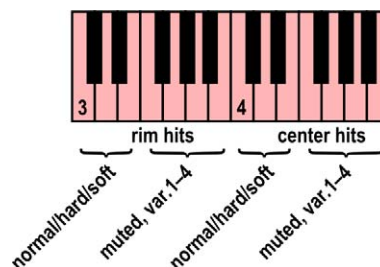
**Mapping:**

C3–B3 – rim hits

C4–B4 – body hits

C–E: Normal/hard/soft attack

F–B: muted, var. 1–4



**14 Cym-China\_22Z\_Brush****Range: C4–G4****Samples: 4****RAM: 1 MB**

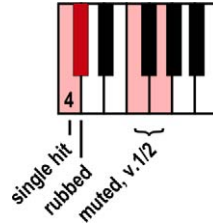
Brushes: Normal hit, rub, and muted hits  
1 velocity layer

**Mapping:**

C4: Single hit, normal

C#4: Rub

F4–G4: muted, var. 1/2

**15 Cym-China\_22Z\_Rod****Range: C4–G4****Samples: 4****RAM: 1 MB**

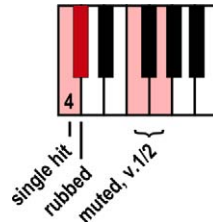
Metal rod: Normal hit, rub, and muted hits  
1 velocity layer

**Mapping:**

C4: Single hit, normal

C#4: Rub

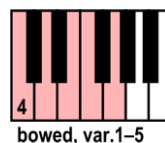
F4–G4: muted, var. 1/2

**16 Cym-China\_22Z\_Bow****Range: C4–G4****Samples: 5****RAM: 1 MB**

Bowed, variations 1–5  
1 velocity layer

**Mapping:**

C4–G4: bowed, var. 1–5



## 09 CYMBAL Ride

20" and 22" ride cymbals

Drumsticks, mallets, timpani mallets, brushes, metal rod, and bowed

Rim, middle and dome hits, normal and damped

### 01 Cym-Ride\_20Z\_Stick (Mallet/Tmp)

Range: C3–B5

Samples: 101

RAM: 6 MB

01 Wood sticks/02 Mallet/03 Timpani mallet

Rim, middle, and dome hits

Normal and damped

5 velocity layers

#### Mapping:

C3–B3 – rim hits

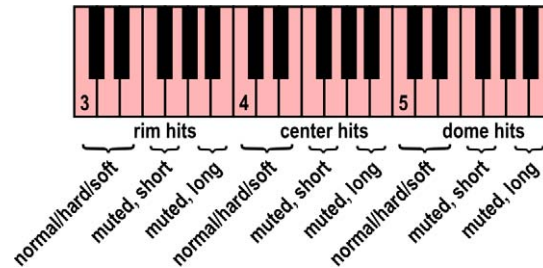
C4–B4 – body hits

C5–B5 – dome hits

C–E: Normal/hard/soft attack

F–G: muted, short

A–B: muted, long



### 04 Cym-Ride\_20Z\_Brush

Range: C4–G4

Samples: 4

RAM: 1 MB

Brushes: Normal hit, rub, and muted hits

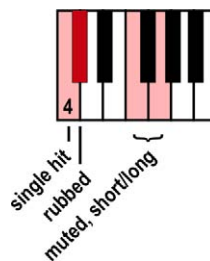
1 velocity layer

#### Mapping:

C4: Single hit, normal

C#4: Rub

F4–G4: muted, short/long





**05 Cym-Ride\_20Z\_Rod****Range: C4–G4****Samples: 4****RAM: 1 MB**

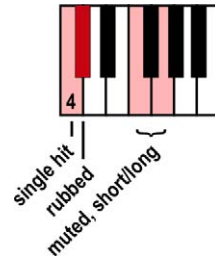
Metal rod: Normal hit, rub, and muted hits  
1 velocity layer

**Mapping:**

C4: Single hit, normal

C#4: Rub

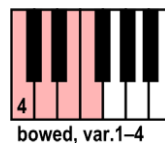
F4–G4: muted, short/long

**06 Cym-Ride\_20Z\_Bow****Range: C4–F4****Samples: 4****RAM: 1 MB**

Bowed, variations 1–4  
1 velocity layer

**Mapping:**

C4–F4: bowed, var. 1–4

**11 Cym-Ride\_22Z\_Stick (Mallet/Tmp)****Range: C3–B5****Samples: 105****RAM: 6 MB**

11 Wood sticks/12 Mallet/13 Timpani mallet  
Rim, middle, and dome hits  
Normal and damped  
5 velocity layers

**Mapping:**

C3–B3 – rim hits

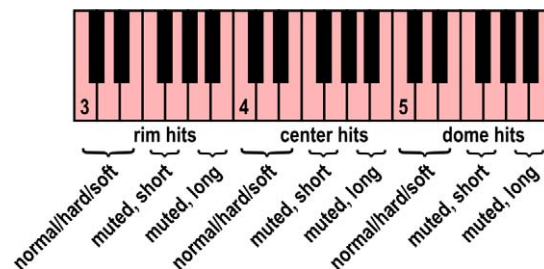
C4–B4 – body hits

C5–B5 – dome hits

C–E: Normal/hard/soft attack

F–G: muted, short

A–B: muted, long



**14 Cym-Ride \_22Z\_Brush****Range: C3–G5****Samples: 11****RAM: 1 MB**

Brushes: Rim, middle, and dome hits

Middle rubs

1 velocity layer

**Mapping:**

Rim:

C3: Single hit, normal

F3–G3: muted, short/long

Body:

C4: Single hit, normal

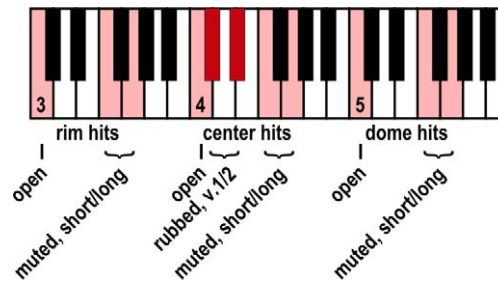
C#4–D#4: Rubs

F4–G4: muted, short/long

Dome:

C5: Single hit, normal

F5–G5: muted, short/long

**15 Cym-Ride \_22Z\_Rod****Range: C3–G5****Samples: 10****RAM: 1 MB**

Metal rod: Rim, middle, and dome hits

Middle rub

1 velocity layer

**Mapping:**

Rim:

C3: Single hit, normal

F3–G3: muted, short/long

Body:

C4: Single hit, normal

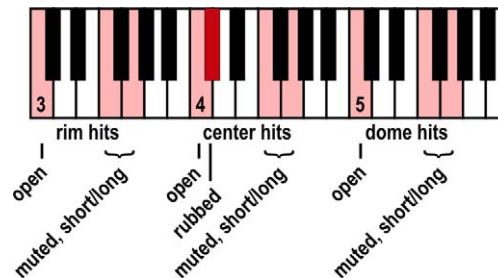
C#4: Rub

F4–G4: muted, short/long

Dome:

C5: Single hit, normal

F5–G5: muted, short/long



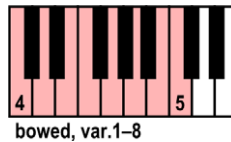
**16 Cym-Ride\_22Z\_Bow****Range: C4–C5****Samples: 8****RAM: 1 MB**

Bowed, variations 1–8

1 velocity layer

**Mapping:**

C4–C5: bowed, var. 1–8

**10 CYMBAL Splash**

6", 8", and 12" splash cymbals

Drumsticks, mallets, timpani mallets, brushes, metal rod, and bowed

Rim, middle and dome hits, normal and damped

**01 Cym-Splash\_6Z\_Stick****Range: C4–B4****Samples: 35****RAM: 2 MB**

Wood sticks: Single hits, normal, hard, and soft attack

Damped, var. 1–4

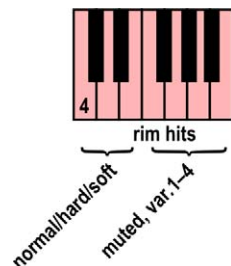
5 velocity layers

**Mapping:**

Rim hits:

C4–E4: Single hits, normal/hard/soft attack

F4–B4: muted, var. 1–4

**02 Cym-Splash\_6Z\_Mallet (Tmp)****Range: C4–B4****Samples: 35****RAM: 2 MB**

02 Mallet/03 Timpani mallet

Single hits, normal, hard, and soft attack

Damped, short and long

5 velocity layers

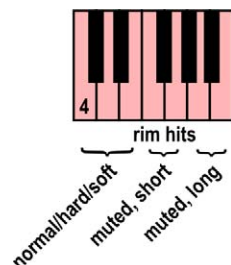
**Mapping:**

Rim hits:

C4–E4: Single hits, normal/hard/soft attack

F4–G4: muted, short

A4–B4: muted, long



**04 Cym-Splash\_6Z\_Brush (Rod)****Range: C4–G4****Samples: 4****RAM: 1 MB**

04 Brushes/05 Metal rod

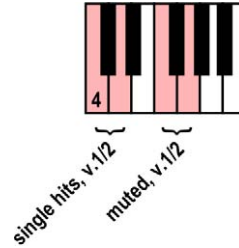
Normal and muted hits

1 velocity layer

**Mapping:**

C4–D4: Single hits, normal

F4–G4: muted, var. 1/2

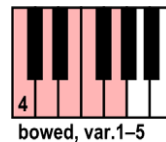
**06 Cym-Splash\_6Z\_Bow****Range: C4–G4****Samples: 5****RAM: 1 MB**

Bowed, variations 1–5

1 velocity layer

**Mapping:**

C4–G4: bowed, var. 1–5

**11 Cym-Splash\_8Z\_Stick****Range: C3–B4****Samples: 70****RAM: 4 MB**

Wood sticks: Rim and middle hits

Normal and damped

5 velocity layers

**Mapping:**

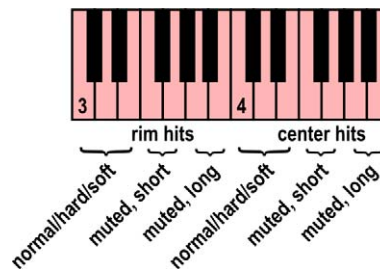
C3–B3 – rim hits

C4–B4 – body hits

C–E: Normal/hard/soft attack

F–G: muted, short

A–B: muted, long



**12 Cym-Splash\_8Z\_Mallet (Tmp)****Range: C4–B4****Samples: 28****RAM: 1 MB**

12 Mallet/13 Timpani mallet

Rim hits, normal, hard, and soft attack

Damped, short and long

4 velocity layers

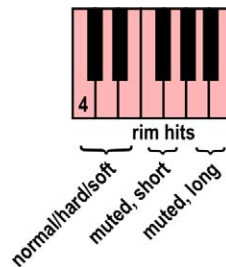
**Mapping:**

Rim hits:

C4–E4: Single hits, normal/hard/soft attack

F4–G4: muted, short

A4–B4: muted, long

**14 Cym-Splash\_8Z\_Brush (Rod)****Range: C4–G4****Samples: 4****RAM: 1 MB**

14 Brushes/15 Metal rod

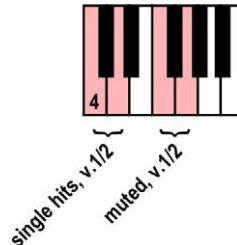
Normal and muted hits

1 velocity layer

**Mapping:**

C4–D4: Single hits, normal

F4–G4: muted, var. 1/2

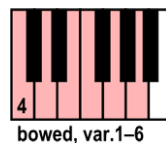
**16 Cym-Splash\_8Z\_Bow****Range: C4–A4****Samples: 6****RAM: 1 MB**

Bowed, variations 1–6

1 velocity layer

**Mapping:**

C4–A4: bowed, var. 1–6



**21 Cym-Splash\_12Z\_Stick (Mallet/Tmp)****Range: C3–B4****Samples: 70****RAM: 4 MB**

21 Wood sticks/22 Mallet/23 Timpani mallet  
 Rim and dome hits  
 Normal and damped  
 5 velocity layers

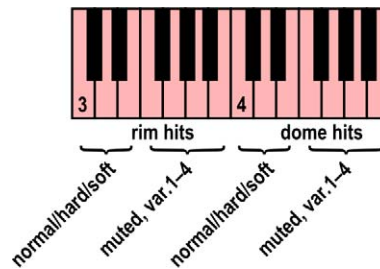
**Mapping:**

C3–B3 – rim hits

C4–B4 – dome hits

C–E: Normal/hard/soft attack

F–B: muted, var. 1–4

**24 Cym-Splash\_12Z\_Brush (Rod)****Range: C4–C5****Samples: 4****RAM: 1 MB**

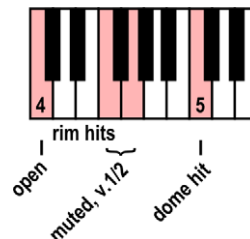
24 Brushes/25 Metal rod  
 Rim hits, normal and damped  
 Dome hit, normal  
 1 velocity layer

**Mapping:**

C4: rim hit, normal

F4–G4: rim hits, muted, var. 1–2

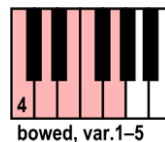
C5: dome hit, normal

**26 Cym-Splash\_12Z\_Bow****Range: C4–G4****Samples: 5****RAM: 1 MB**

Bowed, var. 1–5  
 1 velocity layer

**Mapping:**

C4–G4: bowed, var. 1–5



## Matrices

### Matrix - LEVEL 1

#### L1 01 Piatti

**Samples: 167    RAM: 10 MB**

Piatti A: Single hits

Piatti B: 13, 18, 20, and 22"

**Matrix switches:** Horizontal: Keyswitches, C1–E1

	C1	C#1	D1	D#1	E1
V1	01 Piatti-A_Single-Hits	02 Piatti-B_13Z-Za	06 Piatti-B_18Z-Is	07 Piatti-B_20Z-Is	09 Piatti-B_22Z-Za

#### L1 02 Cymbals

**Samples: 222    RAM: 13 MB**

Patches:

01 Cym-A\_Stick

02 Cym-A\_Mallet

**Matrix switches:** Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	01 Cym-A_Stick	02 Cym-A_Mallet

### Matrix - LEVEL 2

#### 01 Piatti all

**Samples: 256    RAM: 16 MB**

Piatti A: Single hits

Piatti B: 13", 15", 16" K and K2, 18", 20" Istanbul and Avedis, 22"

**Matrix switches:** Horizontal: Keyswitches, C1–A1

	C1	C#1	D1	D#1	E1	F1	F#1	G1	G#1	A1
V1	01 Piatti-A_Single-Hits	01 Piatti-B_11Z-Chi	02 Piatti-B_13Z-Za	03 Piatti-B_15Z-Za	04 Piatti-B_16Z-K	05 Piatti-B_16Z-K2	06 Piatti-B_18Z-Is	07 Piatti-B_20Z-Is	08 Piatti-B_20Z-Za	09 Piatti-B_22Z-Za

#### 02 Cymbal-A all

**Samples: 222    RAM: 13 MB**

Patches:

01 Cym-A\_Stick

02 Cym-A\_Mallet

**Matrix switches:** Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	01 Cym-A_Stick	02 Cym-A_Mallet

#### 03 Cymbal-B all

**Samples: 122    RAM: 7 MB**

Cymbal B

Drumsticks, mallets, metal mallets, brushes

**Matrix switches:** Horizontal: Keyswitches, C1–D#1

	C1	C#1	D1	D#1
V1	01 Cym-B_Stick	02 Cym-B_Mallet	03 Cym-B_Metal	04 Cym-B_Brush

#### 04 Cymbal-C all

**Samples: 108    RAM: 6 MB**

Cymbal C

Drumsticks, mallets, metal mallets

**Matrix switches:** Horizontal: Keyswitches, C1–D1

	C1	C#1	D1
V1	01 Cym-C_Stick	02 Cym-C_Mallet	03 Cym-C_Metal

**05 Cymbal-D all****Samples: 126****RAM: 7 MB**

Cymbal D

Drumsticks, mallets, metal mallets, brushes

**Matrix switches:** Horizontal: Keyswitches, C1–D#1

	C1	C#1	D1	D#1
V1	01 Cym-D_Stick	02 Cym-D_Mallet	03 Cym-D_Metal	04 Cym-D_Brush

**06 Cymbal crash 15Z all****Samples: 334****RAM: 20 MB**

15" crash cymbal

Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

**Matrix switches:** Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	01 Stick	02 Mallet	03 Timpani m.	04 Brush	05 Rod	06 Bow

**07 Cymbal crash 16Z all****Samples: 336****RAM: 21 MB**

16" crash cymbal

Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

**Matrix switches:** Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	11 Stick	12 Mallet	13 Timpani m.	14 Brush	15 Rod	16 Bow

**08 Cymbal china 18Z all****Samples: 224****RAM: 14 MB**

18" China cymbal

Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

**Matrix switches:** Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	01 Stick	02 Mallet	03 Timpani m.	04 Brush	05 Rod	06 Bow

**09 Cymbal china 22Z all****Samples: 222****RAM: 13 MB**

22" China cymbal

Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

**Matrix switches:** Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	11 Stick	12 Mallet	13 Timpani m.	14 Brush	15 Rod	16 Bow

**10 Cymbal ride 20Z all****Samples: 323****RAM: 20 MB**

20" ride cymbal

Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

**Matrix switches:** Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	01 Stick	02 Mallet	03 Timpani m.	04 Brush	05 Rod	06 Bow

**11 Cymbal ride 22Z all****Samples: 344****RAM: 21 MB**

22" ride cymbal

Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed



**Matrix switches:** Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	11 Stick	12 Mallet	13 Timpani m.	14 Brush	15 Rod	16 Bow

**12 Cymbal splash 6Z all****Samples: 118    RAM: 7 MB**

6" splash cymbal

Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

**Matrix switches:** Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	01 Stick	02 Mallet	03 Timpani m.	04 Brush	05 Rod	06 Bow

**13 Cymbal splash 8Z all****Samples: 147    RAM: 9 MB**

8" splash cymbal

Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

**Matrix switches:** Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	11 Stick	12 Mallet	13 Timpani m.	14 Brush	15 Rod	16 Bow

**14 Cymbal splash 12Z all****Samples: 220    RAM: 13 MB**

12" splash cymbal

Drumsticks, mallets, timpani mallets, brushes, metal rod, bowed

**Matrix switches:** Horizontal: Keyswitches, C1–F1

	C1	C#1	D1	D#1	E1	F1
V1	21 Stick	22 Mallet	23 Timpani m.	24 Brush	25 Rod	26 Bow

## 86 Percussion

### Patches

#### 01 TRIANGLE

Triangle A–D

Single notes, performance repetitions, upbeats, tremolo normal and dynamics

##### 01 Tri-A

Range: C4–A7

Samples: 128

RAM: 8 MB

Single notes, open and damped (4 alternations)

Performance repetitions

1–3 upbeats

Tremolo normal (with release samples) and dynamics

Velocity mapping: Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff

Repetitions, upbeats, and normal tremolo, 4 layers

Release samples

AB switch: crescendo/diminuendo

##### Mapping:

C4–D#4: hit from the side, open/damped (damped on black keys)

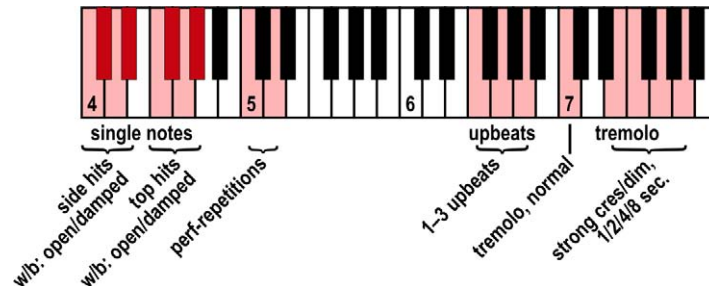
F4–G#4: hit from above, open/damped

C5, D5: performance repetitions (strokes alternating on lower and higher key)

F6–A6: 1–3 upbeats

C7: tremolo, normal

E7–A7: tremolo, strong crescendo and diminuendo, 1/2/4/8 sec.



##### 02 Tri-A\_perf-rep\_dyn9

Range: C4–D4

Samples: 18

RAM: 1 MB

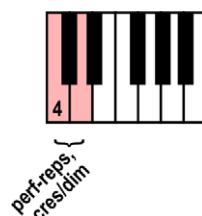
Performance repetitions

Dynamics, 9 repetitions

1 velocity layer

##### Mapping:

C4: crescendo; D4: diminuendo



**03 Tri-B****Range: C4–A7****Samples: 128****RAM: 8 MB**

Single notes, open and damped (4 alternations)

Performance repetitions

1–3 upbeats

Tremolo normal and dynamics

Velocity mapping: Single hits, 8 layers: 0–15 ppp, 16–35 pp, 36–55 p, 56–70 mp, 71–88 mf, 89–108 f, 109–118 ff, 119–127 fff

Repetitions, upbeats, and normal tremolo, 4 layers

Release samples

AB switch: crescendo/diminuendo

**Mapping:**

C4–D#4: hit from the side, open/damped (damped on black keys)

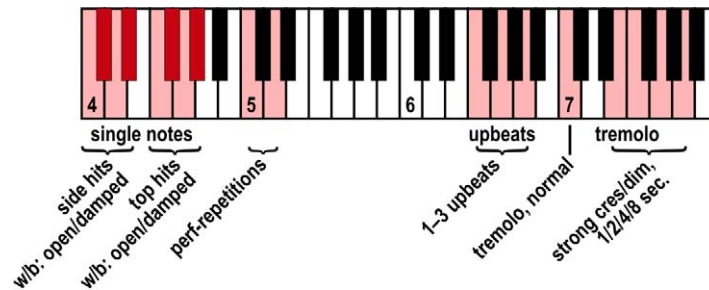
F4–G#4: hit from above, open/damped

C5, D5: performance repetitions (strokes alternating on lower and higher key)

F6–A6: 1–3 upbeats

C7: tremolo, normal

E7–A7: tremolo, strong crescendo and diminuendo, 1/2/4/8 sec.

**04 Tri-B\_perf-rep\_dyn9****Range: C4–D4****Samples: 18****RAM: 1 MB**

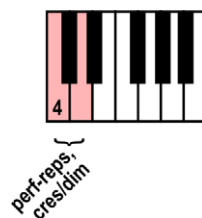
Performance repetitions

Dynamics, 9 repetitions

1 velocity layer

**Mapping:**

C4: crescendo; D4: diminuendo



**05 Tri-C****Range: C2–A#7****Samples: 157****RAM: 9 MB**

Various beaters

Single notes, open and damped

Performance repetitions

1–4 upbeats

Tremolo normal and dynamics

Velocity mapping: Single hits and repetitions, 4 layers

Upbeats, 2 layers

Normal tremolo, 3 layers

Release samples

AB switch: crescendo/diminuendo

**Mapping:**

Wood beater:

C2–D#2: hit from the side, open/damped (damped on black keys)

F2–G2: with vibrato, var. 1/2

Plastic beater:

C3–D#3: hit from the side, open/damped (damped on black keys)

F3–G3: with vibrato, var. 1/2

Thin metal beater:

C4–D#4: hit from the side, open/damped (damped on black keys)

E4: muted fast

F4–G4: with vibrato, var. 1/2

A4–B4: hit from above, var. 1/2

Thick metal beater:

C5–D#5: hit from the side, open/damped (damped on black keys)

F5–G5: with vibrato, var. 1/2

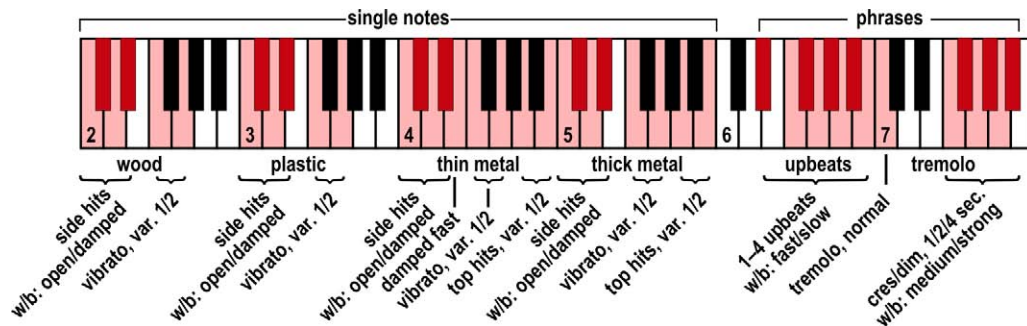
A5–B5: hit from above, var. 1/2

Phrases:

D#6–B6: 1–4 upbeats, slow and fast (slow upbeats on black keys)

C7: tremolo, normal

F7–A#7: tremolo, medium and strong crescendo and diminuendo, 1/2/4 sec. (strong dynamics on black keys)



**06 Tri-D****Range: C2–A#7****Samples: 139****RAM: 8 MB**

Various beaters

Single notes, open and damped

Performance repetitions

1–3 upbeats

Tremolo normal and dynamics

Velocity mapping: Single hits, repetitions, and normal tremolo, 3 layers

Upbeats, 2 layers

Release samples

AB switch: crescendo/diminuendo

**Mapping:**

C2–B2 – wood beater

C3–B3 – plastic beater

C4–B4 – thin metal beater

C5–B5 – thick metal beater

C–D#: hit from the side, open/damped (damped on black keys)

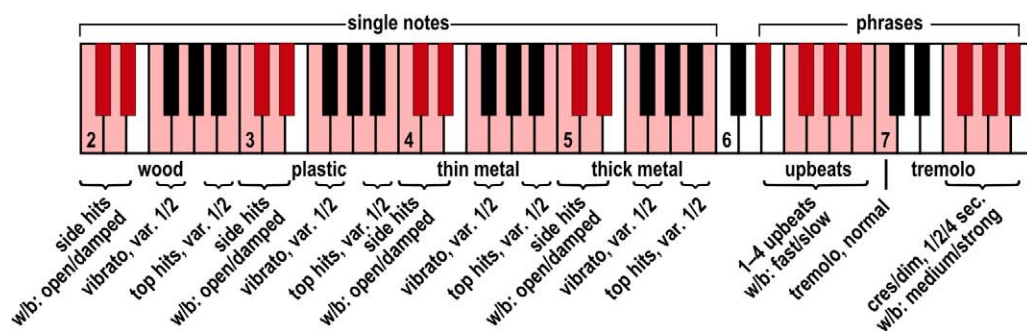
F–G: with vibrato, var. 1/2

A–B: hit from above, var. 1/2

D#6–B6: 1–4 upbeats, slow and fast (slow upbeats on black keys)

C7: tremolo, normal

F7–A#7: tremolo, medium and strong crescendo and diminuendo, 1/2/4 sec. (strong dynamics on black keys)

**10 WATERPHONE**

Single notes, bowed, straight and modulated

Pizzicato

Repetitions

3-note arpeggios

Effects

**01 WP\_basic****Range: C3–G5****Samples: 11****RAM: 1 MB**

Single notes

Bowed, straight

1 velocity layer

**02 WP\_basic\_modulation****Range: C3–E7****Samples: 20****RAM: 1 MB**

Single notes

Bowed, modulated

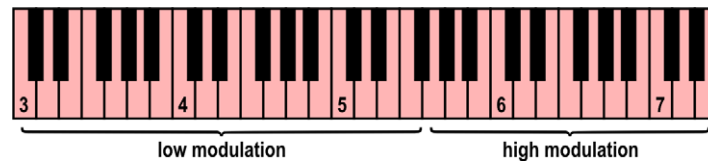
The modulation of the tone is effected by tipping the instrument or moving it in circles.

1 velocity layer

**Mapping:**

C3–F5: Low modulations

G5–E7: High modulations

**03 WP\_pizz****Range: E3–C6****Samples: 11****RAM: 1 MB**

Single notes

Pizzicato

1 velocity layer

**04 WP\_repetition****Range: E3–C6****Samples: 33****RAM: 2 MB**

Repetitions, bowed. Each tone is repeated 8 times; due to the quick action of the bow, the water starts to move in the body and modulates the tone, which can be heard especially well in the decay phase of the samples.

1 velocity layer

Release samples

AB switch: release duration long/short

**05 WP\_arpeggio****Range: E3–A5****Samples: 9****RAM: 1 MB**

Arpeggios, bowed. These arpeggios each consist of three notes. The tones sound together after the strokes because of the long decay time, which creates a "singing" effect.

1 velocity layer

**06 WP\_FX****Range: G1–A#7****Samples: 31****RAM: 1 MB**

This Patch contains various effects that can be created with the waterphone, ranging from pizzicato tremolos to multivoice bowing with repetitions. Most of these effects have two variations, each mapped to two keys to allow for a little transposition. Some of the samples are quite long, so – hold the key!

1 velocity layer

**Mapping:**

G1–A#1: pizzicato, tremolo

C2–D#2: pizzicato, short glissando

F2–G#2: glissando, slow

C3–D#3: spherical sounds, bowed

G3–A#3: cluster glissando

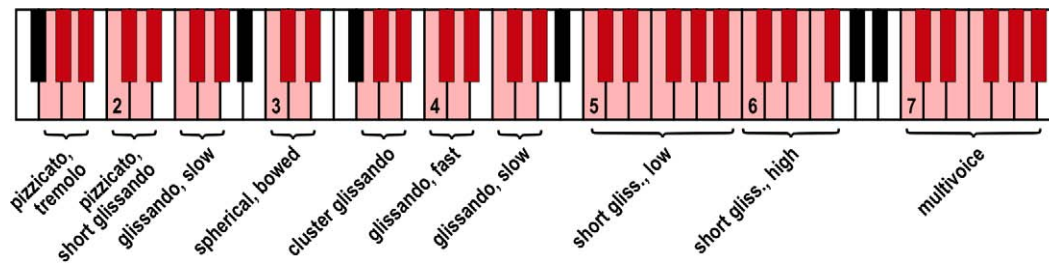
C4–D#4: glissando, fast

F4–G#4: glissando, slow (same as above)

C5–B5: short glissando, low (7 variations)

C6–F#6: short glissando, high (4 variations)

C7–A#7: multivoice (6 variations)



## Matrices

### Matrix - LEVEL 1

#### L1 01 Triangle-A

Samples: 128

RAM: 8 MB

Patch:

01 Tri-A

#### L1 06 Waterphone

Samples: 31

RAM: 1 MB

Patches:

01 WP\_basic

02 WP\_basic\_modulation

**Matrix switches:** Vertical: Modwheel, 2 zones

	H1
V1	01 WP_basic
V2	02 WP_basic_modulation

### Matrix - LEVEL 2

#### 01 Triangle-A

Samples: 146

RAM: 9 MB

Patches:

01 Tri-A

02 Tri-A\_perf-rep\_dyn9

**Matrix switches:** Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	01 Tri-A	02 Tri-A_perf-rep_dyn9

#### 02 Triangle-B

Samples: 146

RAM: 9 MB

Patches:

03 Tri-B

04 Tri-B\_perf-rep\_dyn9

**Matrix switches:** Horizontal: Keyswitches, C1–C#1

	C1	C#1
V1	03 Tri-B	04 Tri-B_perf-rep_dyn9

#### 11 Waterphone

Samples: 115

RAM: 7 MB

Sounds normal and modulated

Pizzicato

Repetitions

Arpeggio

Effects

**Matrix switches:** Horizontal: Keyswitches, C1–E1      Vertical: Modwheel, 2 zones

	C1	C#1	D1	D#1	E1
V1	01 WP_basic	03 WP_pizz	04 WP_repetition	05 WP_arpeggio	06 WP_FX
V2	02 WP_basic_modulation	03 WP_pizz	04 WP_repetition	05 WP_arpeggio	06 WP_FX